



**FAMILY & CONSUMER  
SCIENCES**

**HEALTH SCIENCE**

**SKILLED & TECHNICAL  
SCIENCES**

**MARKETING**

**INFORMATION  
TECHNOLOGY**

**BUSINESS**

**AGRICULTURE**

**TECHNOLOGY &  
ENGINEERING**

# KEY to the information in the CAREER CHARTS\*

## Star Rating

The Utah Department of Workforces Services created the star rating system to rank jobs based on both outlook (90 percent on the number of annual openings projected for the occupation, and 10 percent on the growth rate) and wages (median annual wages for the occupation in Utah). "Five Star" jobs are those with the strongest employment outlook and high wages, with four, three, two and one star ratings applied as the rankings go down. Please note, however, that occupations are grouped by training level and so the wages for a "high paying" job that requires just short-term on-the-job training, will not match the wages of a "high paying" job that requires a college education. In addition, a five star rating does not necessarily mean that a job will be easy to find since that will depend on the number of qualified applicants available to fill openings. Think "demand vs. supply."

## Occupational Title & Description

Occupational titles and descriptions reflect information developed by the U. S. Department of Labor to use in the Occupational Information Network, also known as "O\*NET." (<http://online.onetcenter.org/>)

## Interest Code

Also known as "Holland codes," the interest codes assigned to occupations in the chart come from O\*NET. You may have taken an interest assessment to help you understand your personal career interest code, and that will help you find occupations that are suited to your interests. For more information on "Realistic (R)," "Investigative (I)," "Artistic (A)," "Social (S)," "Enterprising (E)," and "Conventional (C)" interest types (and combinations thereof), talk to your school counselor and complete the Interest Profiler in UtahFutures.

## Statewide Hourly Wages

The first amount listed in this column is for “inexperienced” workers and reflects the average wage of the bottom third of the people working in that occupation in Utah. The second amount in the column is the “median” wage, representing the middle wage in the full range of wages paid to workers in that occupation in Utah. Source of data: Utah Department of Workforce Services.

## Utah Job Openings

This column reflects the average number of annual openings (total of openings due to growth, plus net replacement, 2006-16) that are pro-

jected for the occupation, as well the total number of people in Utah projected to be employed in this occupation by the year 2018 (reflecting the size of that occupation in Utah). Source of data: Utah Department of Workforce Services.

## Education/ Training Level

There are eleven levels of education and training defined by the U. S. Department of Labor to describe that level generally needed to qualify for employment. “Long-term” is training that lasts 12 months or more; “Moderate-term” lasts 1-12 months; and “Short-term” is under 0-1 month long. If you have questions about other terms used, talk to your counselor or consult the glossary in Utah-Futures. Source of Data: Utah Department of Workforce Services.

## Other

Other interesting or important facts about the occupation; e.g., “Licensed” indicates that this is an occupation for which you must be licensed to practice in the state of Utah. (Full list of licensed occupations in Utah can be found at: <http://jobs.utah.gov/opencms/wi/pubs/licensedoccup>.)

## Shaded Cells:

You may have noticed that some of the cells in “Wages,” “Job Openings” and “Training Level” are shaded. The shading indicates that this occupation meets the criterion for “High wage” (more than \$15.70/hour), “High Demand” (50 or more annual openings), and/or “High Skills” (training results in certification, licensure, or college degree), defined by the Utah State Office of Education.

*\*As a total group, the occupations reflected in this series of charts by Area of Study, reflect the large majority of the jobs in which people are employed in Utah.*



# AGRICULTURE

## Did you know?

Agriculture is the nation's largest employer, generating approximately 20% of our nation's gross national product and 20% of our national employment.

Learn More > [www.utahcte.org/career/agriculture.php](http://www.utahcte.org/career/agriculture.php)



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*****	<b>Construction and Mining Supervisor/Manager</b> – Directly supervises and coordinates activities of construction trades workers and their helpers.	ERC	\$19.93 \$26.10	440 Openings 13,324 Total	Related Experience	Licensed Nontraditional for women
****	<b>Environmental Scientist and Specialist, Including Health</b> – Conducts research to develop methods of eliminating or controlling sources of environmental pollutants.	IRC	\$21.56 \$29.02	40 Openings 949 Total	Master's Degree	Licensed
*	<b>Farmworker and Laborer, Crop, Nursery, and Greenhouse</b> – Performs general farm labor duties as directed by farmers or supervisors.	R	\$7.86 \$9.61	220 Openings 7,569 Total	Short-Term OJT	
Not Rated	<b>Forest and Conservation Technician</b> – Compiles data pertaining to size, content, condition, and other characteristics of forest tracts.	RIE	\$9.60 \$11.90 (2016)	50 Openings 1,030 Total (2016)	Associate Degree	Nontraditional for women
***	<b>Laborer and Freight, Stock, and Material Mover, Hand</b> – Loads, unloads, and moves freight materials at a plant, yard, or other work site.	R	\$8.30 \$11.00	790 Openings 21,018 Total	Short-Term OJT	Nontraditional for women

### Shaded Cells:

You may have noticed that some of the cells in "Wages," "Job Openings" and "Training Level" are shaded. The shading indicates that this occupation meets the criterion for "High Wage" (more than \$15.70/hour), "High Demand" (50 or more annual openings), and/or "High Skills" (training results in certification, licensure, or college degree), defined by the Utah State Office of Education.



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Landscaping and Groundskeeping Worker</b> – Landscapes and maintains gardens, lawns, and grounds.	RC	\$8.33 \$11.17	570 Openings 17,669 Total	Short-Term OJT	Nontraditional for women
*	<b>Packer and Packager, Hand</b> – Packs or packages a wide variety of products and materials by hand.	RC	\$7.57 \$9.33	180 Openings 7,018 Total	Short-Term OJT	
***	<b>Packaging and Filling Machine Operator and Tender</b> – Tends and operates machines that packages products.	RC	\$8.48 \$11.54	150 Openings 4,681 Total	Short-Term OJT	
****	<b>Veterinarian</b> – Examines, diagnoses, and treats medical problems in animals.	IR	\$25.02 \$38.31	20 Openings 537 Total	Professional Degree	Licensed

### A Sample of Related Postsecondary Programs of Study

- Agribusiness
- Agriculture Business
- Animal, Dairy and Veterinary Sciences/Dairy Herdsman
- Horticulture Training
- Livestock Farm Management
- Ornamental Horticulture



### The Pathways

- Agricultural Systems Technology
- Horticulture Science & Management
- Natural Resources Science & Management
- Production/Processing Animal Science
- Production/Processing Plant & Soil Science
- Production/Processing Science & Management

**UtahFutures.org**  
Career Information System

Access your SEOP and get detailed education and occupational information.

### Additional Resources

[www.utffa.org](http://www.utffa.org)

FFA is the student leadership organization for Agricultural Education.



# BUSINESS

## Did you know?


Business management and administrative services is projected to be one of the fastest growing industries through the year 2014.

Learn More >  
[www.utahcte.org/career/business.php](http://www.utahcte.org/career/business.php)

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Accountant and Auditor</b> – Analyze financial information and prepare reports describing an organization's financial activities.	CE	\$18.85 \$26.58	640 Openings 16,703 Total	Bachelor's Degree	Licensed
****	<b>Administrative Services Manager</b> – Plans and directs office support services of an organization.	EC	\$22.33 \$31.45	70 Openings 1,837 Total	Experience + Bachelor's	
****	<b>Bill and Account Collector</b> – Locates and notifies customers of delinquent accounts to solicit payment.	CE	\$11.22 \$14.02	170 Openings 4,536 Total	Short-Term OJT	
****	<b>Billing and Posting Clerk and Machine Operator</b> – Operates machines that calculate and record billing, accounting, sales, and inventory data.	CE	\$10.67 \$13.63	170 Openings 4,536 Total	Moderate OJT	Nontraditional for men
<div> <div></div> <p><b>The three largest employers in Utah are Brigham Young University, the Department of Defense (Hill Field AFB), and the University of Utah.</b></p> </div>						
*****	<b>Bookkeeping, Accounting, and Auditing Clerk</b> – Computes and records financial data according to accounting and bookkeeping procedures.	CE	\$9.60 \$13.00	560 Openings 20,527 Total	Moderate OJT	Nontraditional for men
****	<b>Budget Analyst</b> – Analyzes data to determine resources needed to meet obligations. Makes budget recommendations.	CEI	\$19.20 \$26.00	20 Openings 687 Total	Bachelor's Degree	
*	<b>Cashier</b> – Receives payments and issues receipts for sales and other financial transactions.	CE	\$6.10 \$7.70	2,050 Openings 38,457 Total	Short-Term OJT	Nontraditional for men

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*****	<b>Chief Executive</b> – Provides overall direction for organizations. Determines and formulates policies and strategies.	EC	\$32.66 \$62.78	160 Openings 4,713 Total	Experience + Bachelor's	Nontraditional for women
*****	<b>Claims Adjuster, Examiner, and Investigator</b> – Investigates and determines the extent of an insurance company's liability.	CE	\$16.70 \$24.69	70 Openings 1,784 Total	Long-Term OJT	
**	<b>Compensation and Benefits Manager</b> – Plans and directs compensation and benefits activities and staff of an organization.	ECS	\$26.01 \$36.47	10 Openings 392 Total	Experience + Bachelor's	
***	<b>Counter and Rental Clerk</b> – Greets customers and receives orders for services. May accept payment.	CE	\$8.10 \$10.94	180 Openings 5,205 Total	Short-Term OJT	
***	<b>Courier and Messenger</b> – Receives and delivers messages, documents, packages, and other items.	RCE	\$9.89 \$11.55	20 Openings 811 Total	Short-Term OJT	Nontraditional for women
*****	<b>Court, Municipal, and License Clerk</b> – Performs clerical duties in a court of law or issues licenses or permits to qualified applicants.	CE	\$11.51 \$14.04	60 Openings 1,434 Total	Short-Term OJT	Nontraditional for men
***	<b>Dispatcher (Except Police, Fire, and Ambulance)</b> – Schedules and dispatches workers, work crews, or service vehicles to appropriate locations.	CRE	\$11.32 \$15.31	50 Openings 1,829 Total	Moderate OJT	
*	<b>Employment, Recruitment, and Placement Specialist</b> – Develops relationships with employers to provide employment opportunities for job applicants.	ESC	\$13.81 \$19.27	90 Openings 1,902 Total	Bachelor's Degree	
*****	<b>Executive Secretary and Administrative Assistant</b> – Assists executives by coordinating and directing basic office services.	CE	\$13.94 \$18.03	360 Openings 12,361 Total	Moderate OJT	Nontraditional for men

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
	<b>File Clerk</b> – Files correspondence, cards, invoices, receipts, and other records in alphabetical or numerical order.	CRE	\$8.92 \$11.87	30 Openings 983 Total	Short-Term OJT	Nontraditional for men
*****	<b>Financial Analyst</b> – Directs and implements financial policies and practices including preparing budgets.	EC	\$28.57 \$41.86	160 Openings 5,303 Total	Experience + Bachelor's	
*****	<b>General and Operations Manager</b> – Provides overall direction for establishments. Formulates policies. Plans and directs operations.	ECS	\$19.67 \$33.05	700 Openings 20,437 Total	Experience + Bachelor's	
***	<b>General Office Clerk</b> – Performs clerical duties to provide clerical support to office staff.	CER	\$8.49 \$11.53	970 Openings 33,109 Total	Short-Term OJT	Nontraditional for men
***	<b>Human Resources Assistant</b> – Compile and keep personnel records.	CES	\$12.43 \$16.51	40 Openings 1,168 Total	Short-Term OJT	Nontraditional for men
***	<b>Industrial Production Manager</b> – Plans, organizes, and directs the work activities and resources necessary for manufacturing products.	EC	\$27.85 \$38.60	50 Openings 1,178 Total	Bachelor's Degree	Nontraditional for women
****	<b>Insurance Claims and Policy Processing Clerk</b> – Obtains information for settling insurance claims or opening/changing insurance policies.	CE	\$10.14 \$13.17	40 Openings 1,669 Total	Moderate OJT	Nontraditional for men
	<b>Law Clerk</b> – Researches and analyzes law sources to prepare legal documents for use by attorney.	CIE	\$12.75 \$14.93	20 Openings 816 Total	Bachelor's Degree	
*****	<b>Lawyer</b> – Conducts criminal and civil lawsuits, prepares legal documents, advises clients on legal practices.	EI	\$30.82 \$48.39	280 Openings 8,575 Total	Professional Degree	Licensed
****	<b>Legal Secretary</b> – Prepares legal documents and correspondences.	CE	\$13.32 \$17.82	70 Openings 2,243 Total	Moderate OJT	Nontraditional for men

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*****	<b>Loan Interviewer and Clerk</b> – Review loan papers, prepare loan documents complete transactions upon loan approval.	CE	\$11.87 \$14.42	170 Openings 4,825 Total	Short-Term OJT	Nontraditional for men
 <b>According to a survey conducted by Microsoft, people in the U. S. work an average of 45 hours a week, but consider 16 of those hours to be unproductive.</b>						
*****	<b>Loan Officer</b> – Evaluates and recommends approval of commercial, real estate, or credit loans.	CES	\$15.85 \$23.31	190 Openings 6,952 Total	Bachelor's Degree	Licensed
	<b>Mail Clerk and Mail Machine Operator (Except Postal Service)</b> – Prepares incoming and outgoing mail or packages for distribution and mailing.	CR	\$8.88 \$11.77	30 Openings 1,591 Total	Moderate OJT	
****	<b>Management Analyst</b> – Analyzes and suggests improvements to organizations to help management operate efficiently.	IEC	\$19.63 \$30.37	300 Openings 7,928 Total	Experience + Bachelor's	
	<b>Meeting and Convention Planner</b> – Coordinates the activities of staff and convention personnel to make arrangements for group meetings.	ECS	\$13.51 \$18.94	20 Openings 540 Total	Bachelor's Degree	Nontraditional for men
*	<b>New Accounts Clerk</b> – Interviews persons who wish to open bank accounts.	CES	\$12.24 \$13.46	40 Openings 996 Total	Related Experience	Nontraditional for men
***	<b>Operations Research Analyst</b> – Analyzes management and operational problems within an organization.	ICE	\$18.79 \$25.42	40 Openings 892 Total	Related Experience	
***	<b>Order Clerk</b> – Receives and processes incoming orders for materials, merchandise, or services.	CES	\$8.70 \$11.23	110 Openings 3,334 Total	Short-Term OJT	
*****	<b>Paralegal and Legal Assistant</b> – Assists lawyers by researching legal precedents, investigating facts and preparing legal documents.	CIE	\$14.75 \$19.37	80 Openings 2,197 Total	Associate Degree	Nontraditional for men



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Payroll and Timekeeping Clerks</b> – Keeps daily, weekly, or monthly records showing payroll activities and transactions.	CE	\$12.34 \$16.31	30 Openings 1,315 Total	Moderate OJT	Nontraditional for men
***	<b>Personal Financial Advisor</b> – Provides financial counseling to individuals about debt management and other financial matters.	ECS	\$16.57 \$24.68	160 Openings 4,221 Total	Bachelor's Degree	
*****	<b>Postal Service Mail Carrier</b> – Sorts mail for delivery, and delivers mail along an established route by vehicle or on foot.	CR	\$19.76 \$25.21	110 Openings 2,565 Total	Short-Term OJT	
*****	<b>Production, Planning, and Expediting Clerk</b> – Coordinates the flow of work and materials according to production schedule; primarily clerical.	CE	\$12.75 \$18.93	120 Openings 3,917 Total	Short-Term OJT	
****	<b>Property and Real Estate Manager</b> – Manages and oversees operations, maintenance, and administrative functions for various properties.	EC	\$15.72 \$27.36	100 Openings 3,589 Total	Bachelor's Degree	Licensed
*****	<b>Purchasing Agent, Except Wholesale, Retail, and Farm</b> – Directs activities involved with purchasing goods and services for an organization.	CE	\$16.76 \$24.65	140 Openings 3,572 Total	Related Experience	
 <b>According to a study by the U.S. Small Business Association, only 2/3 of all small business startups survive the first two years and less than half make it to four years.</b>						
**	<b>Purchasing Manager</b> – Plans and directs the activities of workers involved in purchasing materials, products, or services.	EC	\$27.15 \$38.35	20 Openings 515 Total	Experience + Bachelor's	
****	<b>Real Estate Appraiser</b> – Appraises real property to determine its value for purchase, sales, investment or loan purposes.	ECR	\$15.15 \$20.25	50 Openings 1,696 Total	Applied Technology	Licensed

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Receptionists and Information Clerk</b> – Greets visitors to an establishment, provides information, other assigned clerical duties.	CES	\$8.18 \$10.57	720 Openings 16,840 Total	Short-Term OJT	Nontraditional for men
***	<b>Reservation and Transportation Ticket Agent and Travel Clerk</b> – Makes reservations or sells tickets to transportation passengers. May check baggage.	CES	\$8.95 \$11.86	260 Openings 7,440 Total	Short-Term OJT	
****	<b>Secretary, Except Legal, Medical, and Executive</b> – Conducts clerical work and minor administrative or business functions for managers/officials.	CE	\$10.02 \$13.33	710 Openings 25,930 Total	Moderate OJT	Nontraditional for men
****	<b>Shipping, Receiving, and Traffic Clerk</b> – Verifies and keeps records of incoming and outgoing shipments. Prepares items for shipment.	CRE	\$9.72 \$12.52	290 Openings 7,710 Total	Short-Term OJT	
***	<b>Stock Clerk and Order Filler</b> – Receives, stores, and issues materials from stockroom or warehouse. Fills customer orders.	CR	\$8.19 \$10.37	480 Openings 15,620 Total	Short-Term OJT	
****	<b>Supervisor/Manager of Office and Administrative Support Worker</b> – Plans, directs, and coordinates office support services of an organization.	ECS	\$14.77 \$20.10	510 Openings 14,930 Total	Related Experience	
*	<b>Teller</b> – Receives and pays out money in a financial institution. Keeps records of financial transactions.	CE	\$9.45 \$11.07	400 Openings 7,170 Total	Short-Term OJT	Nontraditional for men
N/A	<b>Title Examiner, Abstractor, and Searcher</b> – Search real estate records, examine titles, or summarize pertinent legal or insurance details.	CER	N/A	N/A	Moderate OJT	

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
**	<b>Training and Development Specialist</b> – Plans, directs, and coordinates the training activities of an organization.	SAC	\$14.84 \$21.47	160 Openings 3,721 Total	Bachelor's Degree	
****	<b>Transportation, Storage, and Distribution Manager</b> – Plans, directs, and coordinates the transportation operations of an organization's schedules.	EC	\$25.26 \$34.73	30 Openings 983 Total	Related Experience	
***	<b>Wholesale and Retail Buyer, Except Farm Products</b> – Selects and buys merchandise or commodities (other than farm products) from suppliers for resale.	EC	\$15.29 \$22.52	40 Openings 1,336 Total	Related Experience	
**	<b>Word Processor and Typist</b> – Uses computer to prepare letters, reports, forms, or other material from draft or voice recording.	CE	\$8.72 \$13.40	10 Openings 502 Total (Metro)	Moderate OJT	Nontraditional for men

### A Sample of Related Postsecondary Programs of Study

- Accounting
- Administrative Support
- Business Management
- Entrepreneurship
- Finance
- Office Technology
- Real Estate

### The Pathways

- Accounting & Finance
- Business Administrative Support
  - Business Entrepreneurship
  - Business Management
- Business Technology Support

### Additional Resources

[www.utah-fbla-pbl.org/fbla](http://www.utah-fbla-pbl.org/fbla)

Future Business Leaders of America (FBLA) is the student leadership organization for Business Education.

### Shaded Cells:

You may have noticed that some of the cells in "Wages," "Job Openings" and "Training Level" are shaded. The shading indicates that this occupation meets the criterion for "High Wage" (more than \$15.70/hour), "High Demand" (50 or more annual openings), and/or "High Skills" (training results in certification, licensure, or college degree), defined by the Utah State Office of Education.

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## FAMILY AND CONSUMER SCIENCES

### Did you know?

Family and Consumer Sciences Education empowers individuals and families throughout their life to manage the challenges of living and working in a diverse, global society.

Learn More > [www.utahcte.org/career/family-consumer-sciences.php](http://www.utahcte.org/career/family-consumer-sciences.php)

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*	<b>Baker</b> – Mixes, forms, and bakes ingredients according to recipes.	RC	\$8.20 \$11.08	80 Openings 2,163 Total	Long-Term OJT	
*	<b>Bartender</b> – Mixes and serves alcoholic and nonalcoholic beverages to patrons, following standard recipes.	ECR	\$7.79 \$12.91	138 Openings 2,711 Total	Short-Term OJT	
***	<b>Chef and Head Cook</b> – Directs and participates in the preparation and cooking of soups, meats, vegetables, desserts, etc.	ERA	\$15.39 \$19.58	10 Openings 638 Total	Related Experience	Nontraditional for women
*	<b>Child Care Worker</b> – Monitors and cares for children in schools, businesses, or institutions.	SA	\$7.53 \$8.58	640 Openings 15,176 Total	Short-Term OJT	Licensed Nontraditional for men
*	<b>Child, Family, and School Social Worker</b> – Provide social services to improve the social and psychological functioning of children and families.	SE	\$14.86 \$18.49	90 Openings 2,149 Total	Bachelor's Degree	Licensed Nontraditional for men
***	<b>Clinical, Counseling, and School Psychologist</b> – Diagnoses and evaluates mental and emotional disorders of individuals. Administers treatment.	IS	\$20.50 \$26.53	70 Openings 1,696 Total	Doctoral Degree	Licensed
*	<b>Combined Food Preparation and Serving Worker, Including Fast Food</b> – Performs a variety of food preparation duties to prepare food items for cooking, serving, or storing.	CRE	\$7.42 \$8.04	1,340 Openings 34,288 Total	Short-Term OJT	





Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*	<b>Fitness Trainer and Aerobics Instructor</b> – Evaluates, advises, and trains athletes to maintain their physical fitness.	SRE	\$8.25 \$15.37	140 Openings 3,461 Total	Applied Technology	
<div> <div></div> <div> <b>Which traits did you inherit (and from which parent)?</b> <ul style="list-style-type: none"> <li>• <b>Ability to roll your tongue – or not?</b></li> <li>• <b>Ear lobes attached – or not?</b></li> <li>• <b>“Hitchhiker’s thumb” (curved) – or not?</b></li> </ul> </div> </div>						
*	<b>Floral Designer</b> – Designs and fashions live, cut, dried, or artificial floral arrangements.	AER	\$8.32 \$10.48	50 Openings 1,348 Total	Moderate OJT	
*	<b>Food Preparation Worker</b> – Performs a variety of food preparation duties to prepare food items for cooking, serving, or storing.	RC	\$7.32 \$8.45	240 Openings 5,256 Total	Short-Term OJT	
*****	<b>Food Service Manager</b> – Plans and directs activities of an establishment or department that serves food and beverages.	ECR	\$17.20 \$22.28	120 Openings 3,767 Total	Related Experience	
*	<b>Host and Hostess, Restaurant, Lounge, and Coffee Shop</b> – Welcomes patrons to an establishment, seats them at tables or in a lounge, and ensures quality service.	ES	\$7.41 \$8.27	260 Openings 3,539 Total	Short-Term OJT	
***	<b>Interior Designer</b> – Plans, designs, and furnishes interiors of residential, commercial, or industrial buildings.	AE	N/A	40 Openings 890 Total	Bachelor’s Degree	
***	<b>Kindergarten Teacher</b> – Teaches music, art, and elementary academics to children from 4 to 6 years old.	SA	\$25,890 (contract yr.) \$37,200 (contract yr.)	70 Openings 1,806 Total	Bachelor’s Degree	Licensed Nontraditional for men
*	<b>Laundry and Dry-Cleaning Worker</b> – Operates and tends washing or dry-cleaning machines to clean articles of fabric or leather.	RC	\$7.87 \$8.92	60 Openings 2,279 Total	Moderate OJT	

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Librarian</b> – Provides library services by selecting, acquiring, processing, and organizing library materials.	CSE	\$14.78 \$22.92	40 Openings 1,123 Total	Master's Degree	Nontraditional for men
*	<b>Library Assistant, Clerical</b> – Issues and receives library materials, shelves materials; and assists patrons in locating materials.	CRS	\$7.96 \$9.27	70 Openings 1,270 Total	Short-Term OJT	Nontraditional for men
*	<b>Library Technician</b> – Assists librarian in the acquisition, processing, cataloging, and display of books and materials.	CSE	\$10.23 \$13.29	80 Openings 1,526 Total	Applied Technology	
*	<b>Maids and Housekeeping Cleaner</b> – Performs tasks to keep households or establishments such as hotels and hospitals clean and orderly.	RC	\$7.67 \$8.75	340 Openings 12,235 Total	Short-Term OJT	Nontraditional for men
***	<b>Mental Health and Substance Abuse Counselor</b> – Counsels individuals with problems during recovery from mental illness or alcohol/drug abuse.	SIA	\$16.70 \$22.73	20 Openings 588 Total	Master's Degree	Licensed
***	<b>Middle School Teacher</b> – Teach students in schools in one or more subjects at the middle, intermediate, or junior high level.	SA	\$31,760 (contract yr.) \$45,560 (contract yr.)	280 Openings 6,609 Total	Bachelor's Degree	Licensed Nontraditional for men
*	<b>Personal and Home Care Aide</b> – Performs housekeeping, personal care, and emotional support for clients in their places of residence.	SRC	\$7.90 \$9.03	240 Openings 4,936 Total	Short-Term OJT	Licensed
*	<b>Preschool Teacher</b> – Instructs children up to 5 years of age in a preschool, day care, or other child development center.	SA	\$7.78 \$9.91	90 Openings 2,232 Total	Applied Technology	Licensed Nontraditional for men
*****	<b>Principal</b> – Administers educational programs, school policies, and academic codes of ethics to provide in schools.	ESC	\$62,840 (contract yr.) \$80,280 (contract yr.)	90 Openings 2,107 Total	Experience + Bachelor's Degree	
*	<b>Recreation Worker</b> – Conducts recreation activities with groups in recreational facility or in public, private, or volunteer agency.	SEA	\$7.87 \$10.48	80 Openings 2,289 Total	Bachelor's Degree	

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Secondary School Teacher</b> – Teaches students in secondary schools in one or more subjects.	SAE	\$27,920 (contract yr.) \$43,840 (contract yr.)	310 Openings 7,001 Total	Bachelor's Degree	Licensed
***	<b>Special Education Teacher, Preschool, Kindergarten, &amp; Elementary School</b> – Teaches elementary school subjects to physically, visually, and hearing impaired students.	SA	\$30,450 (contract yr.) \$44,310 (contract yr.)	100 Openings 2,206 Total	Bachelor's Degree	Licensed Nontraditional for men
***	<b>Special Education Teacher, Secondary School</b> – Teaches secondary school subjects to physically, visually, and hearing impaired students.	SI	\$29,680 (contract yr.) \$42,090 (contract yr.)	50 Openings 1,180 Total	Bachelor's Degree	Licensed Nontraditional for men
***	<b>Speech-Language Pathologist</b> – Examines and provides remedial services for persons with speech and hearing disorders.	SIA	\$19.30 \$26.40	50 Openings 1,246 Total	Master's Degree	Licensed Nontraditional for men
	<b>Sewing Machine Operator</b> – Operates and tends sewing machines to join or decorate garments or garment parts.	RC	\$7.65 \$10.11	10 Openings 2,034 Total	Moderate OJT	Nontraditional for men
***	<b>Social and Human Service Assistant</b> – Assists Social Workers and Caseworkers to organize programs that aid families.	CSE	\$8.72 \$11.17	420 Openings 9,808 Total	Moderate OJT	
*	<b>Supervisors/Managers of Food Preparation and Serving Worker</b> – Directs and Coordinates activities of an establishment or department that serves food and beverages.	ECR	\$10.54 \$14.31	230 Openings 9,119 Total	Related Experience	

#### Shaded Cells:

You may have noticed that some of the cells in “Wages,” “Job Openings” and “Training Level” are shaded. The shading indicates that this occupation meets the criterion for “High Wage” (more than \$15.70/hour), “High Demand” (50 or more annual openings), and/or “High Skills” (training results in certification, licensure, or college degree), defined by the Utah State Office of Education.



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Teacher Assistant</b> – Prepares class-room materials and supervises students under the guidance of a teacher.	SC	\$17,490 (contract yr.) \$22,520 (contract yr.)	500 Openings 13,359 Total	Short-Term OJT	Nontraditional for men
*	<b>Vocational Education Teacher, Postsecondary</b> – Teaches vocational and/or occupational subjects at the postsecondary level.	SR	\$26,650 (contract yr.) \$43,670 (contract yr.)	90 Openings 27,410 Total	Experience + Bachelor's	Licensed
N/A	<b>Vocational Education Teacher, Secondary School</b> – Teach vocational or occupational subjects at the secondary school level.	S	\$33,020 (contract yr.) \$42,200 (contract yr.)	N/A	Experience + Bachelor's	Licensed
*	<b>Waiter and Waitress</b> – Takes food orders and serves food and beverages to patrons in dining establishments.	SEC	\$7.32 \$8.72	1,450 Openings 23,163 Total	Short-Term OJT	Nontraditional for men



#### A Sample of Related Postsecondary Programs of Study

- Culinary Arts
- Early Childhood Development
- Family and Human Studies
- Fashion Merchandising
- Hospitality Management
- Interior Design
- Restaurant and Catering

#### The Pathways

- Child Development
- Consumer Economics Services
- Family and Human Services
- Fashion Design, Manufacturing & Merchandising
- Food Science, Dietetics, and Nutrition
- Food Services and Culinary Arts
- Hospitality Services
- Interior Design

#### Additional Resources

[www.utahfccla.org](http://www.utahfccla.org)

Family, Career, and Community Leaders of America (FCCLA) is the student leadership organization for FACS Education.

**UtahFutures.org**  
Career Information System

Access your SEOP and get detailed education and occupational information.

# HEALTH SCIENCE

## Did you know?

The health care industry is robust and growing nationwide; however, it is actually experiencing a critical shortage of workers.

Learn More >  
[www.utahcte.org/career/health-science.php](http://www.utahcte.org/career/health-science.php)




Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
****	<b>Dental Assistant</b> – Assists dentists by performing support duties for the treatment of patients during dental procedures.	CRS	\$10.11 \$13.55	300 Openings 6,419 Total	Moderate OJT	Licensed Nontraditional for men
*****	<b>Dental Hygienist</b> – Performs non-surgical dental treatments such as cleaning plaque from teeth and beneath the gums.	SRC	\$25.69 \$32.31	150 Openings 3,070 Total	Associate Degree	Licensed Nontraditional for men
*****	<b>Dentist</b> – Diagnoses and treats problems of the teeth and tissue of the mouth.	IRS	\$26.12 \$44.72	120 Openings 2,713 Total	Professional Degree	Licensed
***	<b>Emergency Medical Technician and Paramedic</b> – Administers first aid treatment and transports sick or injured persons to medical facility.	SIR	\$9.76 \$14.32	80 Openings 2,249 Total	Applied Technology	Licensed
*****	<b>Family and General Practitioner</b> – Diagnoses illnesses, and prescribes and administers treatment for people suffering from injury or disease.	IS	\$58.12 N/A	70 Openings 1,735 Total	Professional Degree	Licensed
*	<b>Home Health Aide</b> – Attends to the personal health needs of elderly, convalescent, or handicapped persons in their homes.	SR	\$8.27 \$10.02	520 Openings 10,669 Total	Short-Term OJT	Licensed Nontraditional for men

*The U. S. Health Resources and Services Administration (HRSA) estimates that the nation's nursing shortage will reach more than one million nurses by the year 2020.*

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
****	<b>Licensed Practical Nurse</b> – Cares for ill, injured, convalescent, and handicapped persons.	SR	\$14.53 \$18.79	160 Openings 3,194 Total	Applied Technology	Licensed Nontraditional for men
*	<b>Massage Therapist</b> – Massage customers for hygienic or remedial purposes.	SR	\$8.44 \$13.72	90 Openings 2,632 Total	Applied Technology	Licensed Nontraditional for men
*	<b>Medical and Clinical Laboratory Technician</b> – Perform routine medical laboratory tests for the diagnosis, treatment, and prevention of disease.	RIC	\$10.89 \$13.65	90 Openings 2,286 Total	Associate Degree	Licensed Nontraditional for men
***	<b>Medical and Clinical Laboratory Technologist</b> – Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease.	IRC	\$19.32 \$24.50	100 Openings 2,399 Total	Bachelor's Degree	Licensed Nontraditional for men
*****	<b>Medical and Health Services Manager</b> – Plans and coordinates medicine and health services in healthcare organizations.	ECS	\$27.45 \$39.03	120 Openings 3,176 Total	Experience + Bachelor's	
***	<b>Medical Appliance Technician</b> – Construct, fit, maintain, or repair medical supportive devices, such as braces and artificial limbs.	RIS	\$11.11 \$15.03	20 Openings 1,033 Total	Long-Term OJT	
****	<b>Medical Assistant</b> – Performs duties under the direction of a physician, in the examination and treatment of patients.	SCR	\$10.27 \$12.37	340 Openings 8,142 Total	Moderate OJT	Licensed Nontraditional for men
***	<b>Medical and Public Health Social Worker</b> – Assesses and counsels individuals and families with problems relating to finances, employment, etc.	SI	\$16.99 \$23.82	80 Openings 1,570 Total	Bachelor's Degree	Licensed Nontraditional for men

#### Shaded Cells:

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Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*	<b>Medical Records and Health Information Technician</b> – Compiles and maintains medical records of patients in healthcare facilities.	CE	\$10.52 \$13.78	100 Openings 2,433 Total	Associate Degree	Licensed Nontraditional for men
****	<b>Medical Secretary</b> – Performs secretarial duties in a health care setting. Uses specific medical terminology.	CS	\$10.11 \$12.85	370 Openings 8,987 Total	Applied Technology	Nontraditional for men
*	<b>Nursing Aide, Orderly, and Attendant</b> – Works under the direction of medical staff to care for patients in health care facilities.	SRC	\$8.99 \$10.73	490 Openings 13,259 Total	Short-Term OJT	Licensed Nontraditional for men
 <b>Registered nurses hold a variety of qualifying degrees. Approximately 18 percent hold a nursing diploma, 34 percent hold an associate degree, 34.2 percent have a bachelor's degree, and 13 percent hold a master's degree or doctorate.</b>						
*****	<b>Pharmacist</b> – Prepares and dispenses medications, using prescriptions issued by authorized healthcare professionals.	ICS	\$37.44 \$51.56	100 Openings 2,621 Total	Professional Degree	Licensed
*****	<b>Physical Therapist</b> – Applies techniques and treatments that help relieve pain, increase strength for patients.	SIR	\$22.68 \$32.67	100 Openings 2,559 Total	Master's Degree	Licensed
*	<b>Physical Therapist Aide</b> – Prepares patients for and administers physical therapy treatments under direction of a physical therapist.	SR	\$8.03 \$9.44	70 Openings 1,335 Total	Short-Term OJT	Nontraditional for men
N/A	<b>Psychiatric Technician</b> – Provides nursing care such to mentally ill, emotionally disturbed, or mentally retarded patients.	SER	N/A	N/A	Moderate OJT	Nontraditional for men



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*****	<b>Radiologic Technologist and Technician</b> – Takes X-rays and CAT scans of the human body. May operate computerized tomography scanners.	RS	\$15.78 \$21.65	70 Openings 1,918 Total	Associate Degree	Licensed
*****	<b>Registered Nurse</b> – Administers nursing care to ill or injured persons.	SIC	\$22.29 \$27.92	1100 Openings 27,885 Total	Associate Degree	Licensed Nontraditional for men
***	<b>Surgical Technologists</b> – Performs a variety of tasks in operating room - before, during, and after an operation.	RSC	\$13.57 \$16.62	40 Openings 853 Total	Applied Technology	Licensed

### A Sample of Related Postsecondary Programs of Study

- Biotechnician Training
- Clinical Laboratory Sciences
- Dental Hygiene
- Emergency Care and Rescue
- Healthcare Coding and Classification
- Medical Assisting
- Nursing
- Radiography
- Surgical Technology



### The Pathways

- Biotechnology
- Medical Office Administration Assistant
- Dental
- Emergency Medical Technician (EMT)
- Medical Assistant
- Nursing
- Pharmacy
- Surgical Technician
- Therapeutic Rehabilitation/Exercise

### Additional Resources

[www.schools.utah.gov/ate/HST/hosa.html](http://www.schools.utah.gov/ate/HST/hosa.html)

Health Occupations Students of America (HOSA) is the student leadership organization for Health Science Education.

**UtahFutures.org**  
Career Information System

Access your SEOP and get detailed education and occupational information.

# INFORMATION TECHNOLOGY

## Did you know?

Because our global economy is driven by technology, multimedia has become one of the most in-demand fields around.

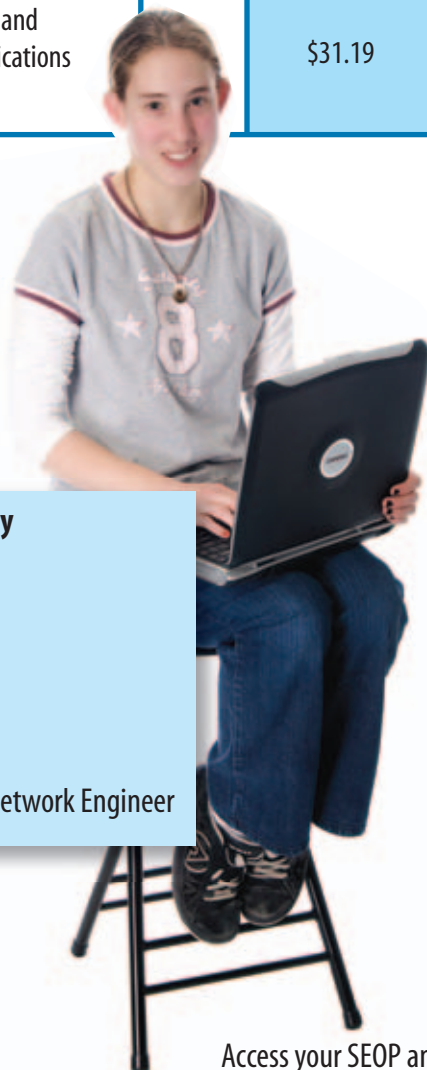
Learn More>

[www.utahcte.org/career/information-technology.php](http://www.utahcte.org/career/information-technology.php)



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*****	<b>Computer and Information Systems Manager</b> – Manages, plans, directs, and coordinates information system and computer programming activities.	ECI	\$33.41 \$46.44	110 Openings 3,061 Total	Experience + Bachelor's	
**	<b>Computer Hardware Engineer</b> – Analyzes data processing needs of clients to plan electronic data processing system.	IRC	\$30.70 \$44.19 (in Utah)	30 Openings 1,172 Total	Bachelor's Degree	Nontraditional for women
<div> <div></div> <p><b>Information Technology workers are needed in nearly every industry. The demand for technically skilled workers is growing in almost every industry, not just in those considered high-tech.</b></p> </div>						
*****	<b>Computer Programmer</b> – Develops and writes computer programs.	IC	\$20.36 \$33.53	160 Openings 7,496 Total	Bachelor's Degree	Nontraditional for women
*****	<b>Computer Software Engineer, Applications</b> – Analyzes data processing needs of clients to plan electronic data processing system.	IRC	\$28.26 \$39.98	280 Openings 7,651 Total	Bachelor's Degree	Nontraditional for women
*****	<b>Computer Software Engineer, Systems Software</b> – Analyzes data processing needs of clients to plan electronic data processing system.	ICR	\$23.15 \$37.41	180 Openings 5,085 Total	Bachelor's Degree	Nontraditional for women
****	<b>Computer Support Specialist</b> – Provides technical assistance to computer users and resolves computer software hardware problems.	RIC	\$13.04 \$18.53	440 Openings 10,049 Total	Associate Degree	

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
****	<b>Computer Systems Analyst</b> – Develops procedures and coordinates the installation of computer programs and operating systems.	ICR	\$22.60 \$31.72	140 Openings 3,598 Total	Bachelor's Degree	Nontraditional for women
	<b>Multi-Media Artist and Animator</b> – Creates graphics for television and computer-generated media.	AI	\$14.47 \$21.25	30 Openings 756 Total	Bachelor's Degree	
****	<b>Network and Computer Systems Administrator</b> – Install, configure, and support an organization's network, and Internet system.	IRC	\$20.78 \$29.47	130 Openings 3,672 Total	Bachelor's Degree	Nontraditional for women
****	<b>Network Systems and Data Communications Analyst</b> – Researches, tests, evaluates, and recommends data communications hardware and software.	IC	\$21.75 \$31.19	160 Openings 3,023 Total	Bachelor's Degree	Nontraditional for women



### A Sample of Related Postsecondary Programs of Study

- Animation
- Computer Information Systems
- Computer Networking
- eCommerce
- Media Design Technology
- Microsoft Network Engineer/Novell Network Engineer

### The Pathways

- Database Development & Administration
  - Technical Support
- Digital Media (Multimedia)
  - Network Systems
- Programming/Software Development
  - Web Development & Administration

### Additional Resources

[www.utahfccla.org](http://www.utahfccla.org)

FBLA [www.utah-fbla-pbl.org/fbla](http://www.utah-fbla-pbl.org/fbla)

SkillsUSA [www.skillsusa-utah.org](http://www.skillsusa-utah.org)

TSA [www.utahtsa.org](http://www.utahtsa.org)

IT students who want to participate in a leadership organization choose between these organizations, depending on what is available at their school.

**UtahFutures.org**  
Career Information System

Access your SEOP and get detailed education and occupational information.



# MARKETING

## Did you know?

Marketing is an expansive field that covers industries from advertising to travel and tourism, from retail to sports and entertainment, from real estate to Internet marketing.

Learn More > [www.utahcte.org/career/marketing.php](http://www.utahcte.org/career/marketing.php)

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*	<b>Actor</b> – Performs dramatic roles, action roles, comedy routines, or tricks of illusion to entertain audiences.	AE	\$8.96 \$11.70	20 Openings 394 Total	Long-Term OJT	
**	<b>Advertising and Promotions Manager</b> – Plans and directs advertising and programs to create or promote interest in a product or service.	EAC	\$23.08 \$38.00	10 Openings 276 Total	Experience + Bachelor's	
****	<b>Advertising Sales Agent</b> – Sells or solicits advertising, such as advertising space in publications, or air time on TV and radio.	ECA	\$12.35 \$18.76	80 Openings 2,138 Total	Moderate OJT	
<div> <p><b><i>Tickle Me Elmo™ was introduced to the U. S. Market in 1996, and by Christmas that year was a sales phenomenon, having sold out in most stores within two hours of opening the day after Thanksgiving.</i></b></p> </div>						
*	<b>Amusement and Recreation Attendant</b> – Performs a variety of attending duties at amusement parks or recreation facilities.	ECR	\$7.58 \$8.56	260 Openings 4,205 Total	Short-Term OJT	
*	<b>Athlete and Sports Competitor</b> – Participates in professional competitive athletic events to entertain sports fans.	RE	N/A N/A	10 Openings 143 Total	Long-Term OJT	
*	<b>Demonstrator and Product Promoter</b> – Demonstrates merchandise and answers questions to create interest in buying products.	ECR	\$8.60 \$10.61	50 Openings 1,370 Total	Moderate OJT	Nontraditional for men



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Driver/Sales Worker</b> – Drives trucks or other vehicles over established routes to deliver and sell goods.	RE	\$7.81 \$12.11	130 Openings 4,123 Total	Long-Term OJT	Nontraditional for women
*	<b>Fine Artist, Including Painter, Sculptor, and Illustrator</b> – Creates original works of art, or produces artwork according to instructions.	AR	\$9.99 \$15.01	20 Openings 502 Total	Long-Term OJT	
*	<b>Hotel, Motel, and Resort Desk Clerk</b> – Register hotel patrons, assign rooms, issue keys, confirm reservations and receive payments.	CES	\$7.93 \$9.14	170 Openings 3,533 Total	Short-Term OJT	
*****	<b>Insurance Sales Agent</b> – Sells or advises clients on life, auto, fire, accident, and other types of insurance.	ECS	\$12.71 \$22.26	280 Openings 7,244 Total	Bachelor's Degree	Licensed
*****	<b>Marketing Manager</b> – Plans and coordinates activities to determine the demand for products and services offered by a firm.	EC	\$27.39 \$42.94	60 Openings 1,569 Total	Experience + Bachelor's	
****	<b>Market Research Analyst</b> – Researches market conditions to determine potential sales of a product or service.	IEC	\$19.74 \$31.17	50 Openings 1,048 Total	Bachelor's Degree	
N/R	<b>Model</b> – Poses for pictures taken by photographers or as subject for paintings or sculptures.	AER	N/A N/A	N/A N/A	Moderate OJT	Nontraditional for men
*	<b>Producer and Director</b> – Producer - selects plays or scripts and arranges financing. Director - auditions and selects cast members, conducts rehearsals, and directs activities of cast and technical crew for stage, motion pictures, television or radio programs.	EA	\$17.16 \$26.71	40 Openings 907 Total	Experience + Bachelor's	



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Public Relations Specialist</b> – Promotes a positive image for individuals or groups by writing, selecting and releasing favorable material.	EAS	\$14.87 \$22.65	170 Openings 3,873 Total	Bachelor's Degree	
*	<b>Retail Salesperson</b> – Sells a wide variety of merchandise. Also greets customers, explains and demonstrates products.	EC	\$7.78 \$9.87	2,260 Openings 55,214 Total	Short-Term OJT	
*****	<b>Sales Manager</b> – Plans, directs, and coordinates sales activities such as quotas and goals for sales representatives.	EC	\$27.72 \$42.13	160 Openings 4,146 Total	Experience + Bachelor's	
*****	<b>Sales Representative, Except Technical and Scientific Products</b> – Sells goods or services for wholesalers or manufacturers to businesses or groups of individuals.	CE	\$14.11 \$23.12	680 Openings 19,823 Total	Moderate OJT	
*****	<b>Sales Representative, Technical and Scientific Products</b> – Sells products that require a technical knowledge of the product and its use.	EC	\$20.54 \$31.48	220 Openings 6,249 Total	Moderate OJT	
***	<b>Securities, Commodities, and Financial Services Sales Agent</b> – Buys and sells securities in investment and trading firms. Develops financial plans.	EC	\$13.32 \$23.04	280 Openings 6,550 Total	Bachelor's Degree	Licensed

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Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Supervisor/Manager of Retail Sales Workers</b> – Directly supervises and coordinates the activities of sales, marketing, and related workers.	ECS	\$11.05 \$14.93	830 Openings 24,587 Total	Related Experience	
***	<b>Telemarketer</b> – Promotes and solicits orders for goods or services over the telephone.	EC	\$8.27 \$10.65	250 Openings 7,850 Total	Short-Term OJT	
*	<b>Usher, Lobby Attendant, and Ticket Taker</b> – Assists patrons at entertainment events by collecting admission tickets and helping patrons find seats.	SCE	\$7.41 \$8.01	90 Openings 1,295 Total	Short-Term OJT	
	<b>Travel Agent</b> – Plans trips for travel agency customers.	EC	\$10.01 \$13.24	20 Openings 1,082 Total	Applied Technology	
*	<b>Writer and Author</b> – Creates original written works for publication or performance.	A	N/A N/A	70 Openings 1,752 Total	Bachelor's Degree	

### A Sample of Related Postsecondary Programs of Study

- Marketing
- Sales and Merchandising

*The average company saves over \$7,000 for each employee suggestion that is applied.*

*The idea behind investing is to put money to use in such a way that it is likely to turn into more money.*



### The Pathways

- Marketing Entrepreneurship
- Marketing Management
- Sales & Service Marketing
- Travel & Tourism

### Additional Resources

[www.utahdeca.org](http://www.utahdeca.org)

DECA is the student leadership organization for Marketing Education.

**UtahFutures.org**  
Career Information System

Access your SEOP and get detailed education and occupational information.

# SKILLED AND TECHNICAL SCIENCES

## Did you know?

The Utah STS Pathways are based on the national skills standards, where applicable, and established state standards.

Learn More >

[www.utahcte.org/career/skilled-technical-sciences.php](http://www.utahcte.org/career/skilled-technical-sciences.php)



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Aircraft Mechanic and Service Technician</b> – Inspects, tests, repairs, maintains, and services aircraft.	RCI	\$20.18 \$24.64	40 Openings 1,689 Total	Applied Technology	Licensed Nontraditional for women
*****	<b>Airline Pilot, Copilot, and Flight Engineer</b> – Flies airplanes and helicopters to carry out a wide variety of tasks.	RCI	N/A N/A	60 Openings 1,538 Total	Bachelor's Degree	Licensed Nontraditional for women
****	<b>Architectural and Civil Drafter</b> – Prepares detailed drawings of architectural designs according to specifications provided by an architect.	RI	\$14.03 \$18.77	60 Openings 1,842 Total	Applied Technology	Nontraditional for women
***	<b>Audio and Video Equipment Technician</b> – Set up or set up and operate audio and video equipment for concerts, sports events, meetings, etc.	RIC	\$9.65 \$17.20	30 Openings 750 Total	Long-Term OJT	Nontraditional for women
***	<b>Automotive Body and Related Repairer</b> – Repairs and customizes automotive bodies and frames.	R	\$11.98 \$16.69	60 Openings 1,892 Total	Long-Term OJT	Nontraditional for women
****	<b>Automotive Service Technician and Mechanic</b> – Repairs automobiles, trucks, buses, and other vehicles, according to manufacturers specifications.	RI	\$11.07 \$17.79	300 Openings 9,433 Total	Applied Technology	Nontraditional for women
<div> <div></div> <div>Construction is one of the nation's largest industries with 8.3 million workers.</div> </div>						
****	<b>Brickmason and Blockmason</b> – Sets bricks, concrete blocks, masonry panels, and other masonry materials.	RCI	\$17.24 \$25.57	90 Openings 2,575 Total	Long-Term OJT	Licensed Nontraditional for women

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
****	<b>Bus and Truck Mechanic and Diesel Engine Specialist</b> – Inspects, repairs, and maintains diesel engines used to power machines.	RC	\$14.34 \$19.29	140 Openings 3,990 Total	Applied Technology	Nontraditional for women
*	<b>Bus Driver, School</b> – Drives a bus to transport students between pick-up points and school.	RC	\$10.71 \$15.03	70 Openings 2,074 Total	Short-Term OJT	Licensed
****	<b>Bus Driver, Transit and Intercity</b> – Drives a bus to transport passengers from place to place within a city or town or from city to city.	RS	\$11.48 \$14.82	30 Openings 1,087 Total	Moderate OJT	Licensed
*	<b>Butcher and Meat Cutter</b> – Cuts, trims, and prepares carcasses and consumer-sized portions of meat.	RCE	\$9.66 \$13.55	60 Openings 1,463 Total	Long Term OJT	
*	<b>Cabinetmaker and Bench Carpenter</b> – Cuts, shapes, and assembles wooden articles, such as cabinets, high grade furniture and store fixtures.	RC	\$10.39 \$13.74	90 Openings 3,573 Total	Long-Term OJT	Nontraditional for women
***	<b>Carpenter</b> – Constructs and repairs structures or fixtures made of wood, plywood, and wallboard.	RCI	\$12.44 \$17.34	590 Openings 2,210 Total	Long-Term OJT	Nontraditional for women
*****	<b>Cement Mason and Concrete Finisher</b> – Mixes, pours, and finishes concrete within fabricated forms for many types of construction projects.	RE	\$13.00 \$16.56	130 Openings 3,676 Total	Moderate OJT	Nontraditional for women
*	<b>Cleaner of Vehicles and Equipment</b> – Washes or otherwise cleans vehicles, machinery, and other equipment.	RC	\$7.54 \$9.08	210 Openings 5,093 Total	Short-Term OJT	Nontraditional for women
***	<b>Computer, Automated Teller, and Office Machine Repairer</b> – Repairs and services office machines, such as adding, and fax machines.	RCI	\$11.53 \$16.58	30 Openings 1,297 Total	Applied Technology	Nontraditional for women
***	<b>Computer-Controlled Machine Tool Operator</b> – Operate computer-controlled machines to perform one or more machine functions on metal or plastic.	RC	\$10.16 \$12.56	20 Openings 615 Total	Moderate OJT	Nontraditional for women

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Construction Laborer</b> – Perform tasks involving physical labor at building and heavy construction projects.	RC	\$9.45 \$12.55	610 Openings 24,534 Total	Moderate OJT	Nontraditional for women
*****	<b>Construction Manager</b> – Plans and directs activities concerned with construction and maintenance of buildings, facilities, etc.	ERC	\$23.47 \$35.37	290 Openings 10,915 Total	Bachelor's Degree	Licensed Nontraditional for women
*****	<b>Correctional Officer and Jailer</b> – Guards and monitors inmates in a correctional facility.	REC	\$15.93 \$18.97	110 Openings 3,049 Total	Moderate OJT	Licensed
*****	<b>Drywall and Ceiling Tile Installer</b> – Applies plaster board, gypsum board, or other wallboard to interior walls and ceilings of buildings.	RC	\$11.28 \$17.02	120 Openings 5,007 Total	Moderate OJT	Nontraditional for women
****	<b>Electrician</b> – Installs, maintains, and repairs electrical wiring, equipment, and fixtures. Follows electrical codes.	RIC	\$15.24 \$20.02	410 Openings 11,079 Total	Long-Term OJT	Licensed Nontraditional for women
***	<b>Electrical and Electronic Equipment Assembler</b> – Assembles and modifies electrical or electronic equipment.	RC	\$9.70 \$12.71	50 Openings 2,864 Total	Short-Term OJT	
****	<b>Electrical and Electronics Repairer, Commercial and Industrial Equipment</b> – Installs, maintains, and repairs electronic equipment.	RIC	\$16.15 \$24.63	40 Openings 1,434 Total	Applied Technology	Licensed Nontraditional for women
***	<b>Electronic Home Entertainment Equipment Installer and Repairer</b> – Installs and repairs radios and televisions, stereo systems, and other electronic entertainment equipment.	RC	\$10.10 \$15.01	20 Openings 508 Total	Applied Technology	Nontraditional for women
***	<b>Fire Fighter</b> – Responds to fire alarms to extinguish fires, protect life and property, and conduct rescue efforts.	RS	\$10.02 \$14.60	140 Openings 2,803 Total	Long-Term OJT	Nontraditional for women
***	<b>Flight Attendant</b> – Provides information and personal services to airline passengers during flight.	ESC	N/A N/A	50 Openings 1,544 Total	Long-Term OJT	
*	<b>Hairdresser, Hairstylist, and Cosmetologist</b> – Provides a wide variety of beauty services to patrons, such as cutting, coloring, and styling hair.	AES	\$8.27 \$11.30	280 Openings 9,051 Total	Applied Technology	Licensed Nontraditional for men



Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
****	<b>Heating, Air Conditioning, and Refrigeration Mechanic and Installer</b> – Installs, services, and repairs heating and air conditioning systems in homes and commercial buildings.	RC	\$14.41 \$18.56	160 Openings 4,079 Total	Long-Term OJT	Licensed Nontraditional for women
****	<b>Industrial Machinery Mechanic</b> – Diagnoses problems in production machinery and equipment. Repairs and maintains machinery	RIC	\$14.40 \$21.27	130 Openings 4,062 Total	Long-Term OJT	Nontraditional for women
****	<b>Industrial Truck and Tractor Operator</b> – Operates industrial trucks and tractors equipped with a forklift, elevated platform, or trailer hitch.	RC	\$11.51 \$14.00	260 Openings 6,266 Total	Short-Term OJT	Nontraditional for women
*****	<b>Inspector, Tester, Sorter, Sampler, and Weigher</b> – Inspects, tests, grades, sorts, samples, or weighs raw materials or manufactured items.	CR	\$11.34 \$15.86	110 Openings 4,705 Total	Moderate OJT	
*	<b>Janitor and Cleaner</b> – Keeps buildings in a clean and orderly condition.	RC	\$7.64 \$9.50	730 Openings 23,803 Total	Short-Term OJT	
N/A	<b>Locomotive Engineer</b> – Drives locomotives to transport passengers and freight.	RC	N/A N/A	N/A N/A	Related Experience	Nontraditional for women
****	<b>Machinist</b> – Sets up and operates machine tools to make or repair metal parts for machines and other equipment.	RCI	\$13.50 \$19.14	80 Openings 5,628 Total	Long-Term OJT	Nontraditional for women
*****	<b>Maintenance and Repair Worker, General</b> – Keeps machines, mechanical equipment, or structures of an establishment in good repair.	RCI	\$11.14 \$16.22	380 Openings 12,664 Total	Moderate OJT	Nontraditional for women
****	<b>Maintenance Worker, Machinery</b> – Performs maintenance such as cleaning and lubricating to keep equipment in good working order.	RCI	\$13.69 \$18.60	30 Openings 986 Total	Short-Term OJT	Nontraditional for women
N/A	<b>Manicurist and Pedicurist</b> – Cleans, shapes, and polishes customers' fingernails and toenails.	RES	N/A N/A	N/A N/A	Applied Technology	Licensed

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Mechanical Drafter</b> – Prepares detailed working diagrams of machinery and mechanical devices.	RCI	\$15.71 \$21.40	30 Openings 932 Total	Applied Technology	Nontraditional for women
****	<b>Mobile Heavy Equipment Mechanic, Except Engine</b> – Repairs and services mobile heavy equipment such as bulldozers, graders, cranes, conveyors, etc.	RC	\$17.68 \$22.80	50 Openings 1,706 Total	Applied Technology	Nontraditional for women
*****	<b>Operating Engineers and Other Construction Equipment Operator</b> – Operates several types of power construction equipment, such as derricks, cranes, shovels, tractors, etc.	RCI	\$14.38 \$18.56	210 Openings 6,996 Total	Moderate OJT	Nontraditional for women
*****	<b>Painter, Construction and Maintenance</b> – Paints walls, buildings, bridges, and other structural surfaces, using brushes, rollers, and spray guns.	RC	\$10.28 \$14.63	250 Openings 8,841 Total	Moderate OJT	Licensed Nontraditional for women
N/A	<b>Parts Salesperson</b> – Sells parts and equipment from behind the counter. Determines type of part needed.	ECR	\$9.58 \$14.19	N/A N/A	Moderate OJT	Nontraditional for women
*	<b>Photographer</b> – Photographs subjects or events using a variety of cameras.	AR	\$9.50 \$15.00	110 Openings 2,978 Total	Long-Term OJT	
*	<b>Plasterer and Stucco Mason</b> – Applies coats of plaster onto interior or exterior walls, ceilings, or partitions of buildings.	R	\$9.34 \$13.39	40 Openings 1,759 Total	Long-Term OJT	Nontraditional for women
****	<b>Plumber</b> – Assembles, installs, and repairs pipes, fittings, and fixtures of heating, water, and drainage systems.	RC	\$13.90 \$20.79	320 Openings 9,429 Total	Long-Term OJT	Licensed Nontraditional for women
*****	<b>Police and Sheriff's Patrol Officer</b> – Patrols assigned areas to enforce laws, regulate traffic, control crowds, and prevent crime.	RE	\$17.21 \$21.61	200 Openings 5,038 Total	Long-Term OJT	Nontraditional for women
****	<b>Police, Fire and Ambulance Dispatcher</b> – Receives calls from the public and broadcasts orders to police patrol units in vicinity to investigate.	CRE	\$12.32 \$15.41	30 Openings 617 Total	Moderate OJT	

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
N/A	<b>Prepress Technician and Worker</b> – Set up and prepare material for printing presses.	RC	\$9.71 \$14.33	N/A N/A	Long-Term OJT	Nontraditional for women
*	<b>Probation Officer and Correctional Treatment Specialist</b> – Performs casework duties to monitor and assist in the rehabilitation of law offenders.	SEC	N/A N/A	30 Openings 825 Total	Bachelor's Degree	Licensed
****	<b>Roofer</b> – Covers roofs of structures with shingles, slate, aluminum, wood, or related materials.	RC	\$10.98 \$16.39	60 Openings 2,460 Total	Moderate OJT	Nontraditional for women
****	<b>Roustabout, Oil and Gas</b> – Assembles, erects, and repairs oil field equipment using hand and power tools.	R	\$15.29 \$22.15	40 Openings 1,373 Total	Moderate OJT	Nontraditional for women
***	<b>Security Guard</b> – Protects property in an establishment by detecting theft, shoplifting, and other unlawful practices.	RCE	\$8.74 \$11.50	300 Openings 8,262 Total	Short-Term OJT	Licensed Nontraditional for women
*****	<b>Sheet Metal Worker</b> – Fabricates, assembles, installs, and repairs sheet metal products and equipment.	R	\$12.96 \$22.81	70 Openings 2,051 Total	Moderate OJT	Nontraditional for women
***	<b>Structural Iron and Steel Worker</b> – Fabricates, assembles, and installs steel frames to give support to buildings and other structures.	RIC	\$14.64 \$19.37	20 Openings 842 Total	Long-Term OJT	Nontraditional for women
*****	<b>Structural Metal Fabricator and Fitter</b> – Fabricates and assembles structural metal products such as frameworks or shells for machinery.	RC	\$12.83 \$17.17	90 Openings 2,675 Total	Moderate OJT	Nontraditional for women
***	<b>Supervisor/Manager of Housekeeping and Janitorial Workers</b> – Supervises the work activities of cleaning personnel.	ECR	\$11.77 \$15.19	90 Openings 3,783 Total	Related Experience	
*****	<b>Supervisor/Manager of Mechanics, Installers, and Repairers</b> – Directly supervises activities of mechanics, repairers, and installers and their helpers.	ECR	\$18.52 \$27.74	170 Openings 4,769 Total	Related Experience	Nontraditional for women

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
*****	<b>Supervisor/Manager of Production and Operating Workers</b> – Directly supervises and coordinates activities of production workers.	ERC	\$15.61 \$22.85	140 Openings 7,220 Total	Related Experience	Nontraditional for women
N/A	<b>Supervisor/Manager of Transportation/Material-Moving Machine/ Vehicle Operators</b> – Supervises the activities of transportation and material-moving machine and vehicle operators.	ECR	\$17.26 \$24.51	N/A  N/A	Related Experience	Nontraditional for women
****	<b>Team Assembler</b> – Work as part of a team having responsibility for assembling an entire product or component of a product.	RCE	\$9.69 \$12.87	270 Openings 10,001 Total	Moderate OJT	
***	<b>Telecommunications Equipment Installers and Repairer</b> – Installs and repairs telephone station and communication equipment.	RIC	\$18.66 \$27.15	40 Openings 1,382 Total	Long-Term OJT	Nontraditional for women
****	<b>Telecommunications Line Installers and Repairer</b> – Installs, repairs, and maintains telephone and television cable and other equipment.	RE	\$16.24 \$20.71	30 Openings 855 Total	Long-Term OJT	Nontraditional for women
*****	<b>Truck Driver, Heavy and Tractor-Trailer</b> – Drives trucks that carry materials weighing 3 tons or more to transport and deliver freight.	RC	\$13.00 \$16.60	870 Openings 26,869 Total	Moderate OJT	Licensed  Nontraditional for women
***	<b>Truck Driver, Light or Delivery Services</b> – Drives a truck, van, or other vehicle with a capacity under 3 tons to transport materials.	RC	\$8.14 \$11.78	350 Openings 12,580 Total	Short-Term OJT	Licensed  Nontraditional for women
****	<b>Water and Liquid Waste Treatment Plant and System Operator</b> – Operates and controls treatment equipment to clean, purify, and neutralize water for human consumption.	RC	\$14.28 \$19.59	70 Openings 1,623 Total	Long-Term OJT	Nontraditional for women

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Welder, Cutter, Solderer, and Brazier –</b> Uses hand welding equipment to weld together, solder or repair metal components and parts.	R	\$12.80 \$16.62	210 Openings 5,619 Total	Long-Term OJT	Licensed Nontraditional for women

#### Shaded Cells:

You may have noticed that some of the cells in "Wages," "Job Openings" and "Training Level" are shaded. The shading indicates that this occupation meets the criterion for "High Wage" (more than \$15.70/hour), "High Demand" (50 or more annual openings), and/or "High Skills" (training results in certification, licensure, or college degree), defined by the Utah State Office of Education.

#### The Pathways

- Carpentry
- Electrician
- HVAC
- Plumbing
- Radio Broadcast Technician
- Television Broadcasting Technician
- Automotive Collision Repair
- Automotive Service Technician
- Electronics
- Heavy Duty Diesel
- Cabinetmaking/Millwork
- Drafting/CAD
- Graphics/Printing
- Machine Tool
- Welding
- Cosmetology/Barbering
- Esthetician/Nail Technician
- Firefighting
- Law Enforcement
- Commercial Art
- Commercial Photography

#### A Sample of Related Postsecondary Programs of Study

- Aeronautics Technology
- Apprenticeship (e.g., Carpenter, HVAC, Diesel Mechanics)
- Building Construction and Construction Management
- CNC Machinist
- Collision Repair Technology
- Computer and Design Graphics Technology
- Cosmetology
- Institute of Public Safety
- Lineman Technology
- Manufacturing and Automation Technology
- Mining
- Safety Management
- Telecommunications
- Trucking

#### Additional Resources

[www.skillsusa-utah.org](http://www.skillsusa-utah.org)

SkillsUSA is the student leadership organization for Skilled and Technical Sciences Education.

*Short trips of less than 10 minutes can be particularly hard on a car, resulting in excessive wear and tear.*

**UtahFutures.org**  
Career Information System

Access your SEOP and get detailed education and occupational information.





## TECHNOLOGY & ENGINEERING

### Did you know?

Nationally, engineering is the second largest of all professions. In Utah, it is one of the fastest growing industries.

[Learn More >](#)

[www.utahcte.org/career/technology-engineering.php](http://www.utahcte.org/career/technology-engineering.php)

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
****	<b>Architect, Except Landscape and Naval</b> – Plans and designs structures for property owners.	AI	\$23.73 \$33.01	40 Openings 1,284 Total	Bachelor's Degree	Licensed Nontraditional for women
****	<b>Chemist</b> – Conducts chemical analyses to develop new products or expand chemical knowledge.	IRC	\$19.74 \$31.17	50 Openings 1,048 Total	Bachelor's Degree	
****	<b>Civil Engineering Technician</b> – Under the direction of engineering staff, helps plan and design construction of roads, bridges, etc.	RCI	\$15.56 \$20.67	30 Openings 721 Total	Associate Degree	Licensed Nontraditional for women
*****	<b>Civil Engineer</b> – Performs engineering duties in designing the construction of roads, airports, bridges, dams, etc.	RIC	\$25.97 \$36.44	140 Openings 3,644 Total	Bachelor's Degree	Licensed Nontraditional for women
<div>▶ <i><b>Sherman Poppen, one of three people credited with the snowboard's invention, was an engineer. From its shape to its material composition, modern snowboards have an engineer's fingerprints all over them.</b></i></div>						
***	<b>Electrical Engineer</b> – Designs, develops, tests, or supervises the manufacturing and installation of electrical equipment.	IR	\$26.72 \$38.17	40 Openings 1,106 Total	Bachelor's Degree	Licensed Nontraditional for women
***	<b>Electrical and Electronic Engineering Technician</b> – Lays out, builds, tests, and modifies electronic components, equipment, and systems.	RI	\$15.56 \$23.39	40 Openings 1,685 Total	Associate Degree	Licensed Nontraditional for women

Star Rating	Occupational Title & Description	Interest Code	Statewide Hourly Wages Inexperienced Median	Utah Job Outlook Openings Total Emp. 2018	Education/ Training Level	Other
***	<b>Electronics Engineers, Except Computer</b> – Designs, develops, and tests electronic components and systems.	IR	\$31.55 \$42.26	40 Openings 1,292 Total	Bachelor's Degree	Licensed Nontraditional for women
***	<b>Industrial Engineering Technician</b> – Records and analyzes operations involved in production and maintenance to improve efficiency.	IRC	\$17.42 \$27.73	20 Openings 626 Total	Associate Degree	Licensed Nontraditional for women
*****	<b>Industrial Engineer</b> – Performs engineering duties to plan and implement production in industrial firms.	ICE	\$25.84 \$34.59	80 Openings 1,940 Total	Bachelor's Degree	Licensed Nontraditional for women
**	<b>Mechanical Engineering Technician</b> – Under the direction of a mechanical engineer, develops and tests machinery and equipment.	RI	\$16.31 \$22.23	10 Openings 504 Total	Associate Degree	Licensed Nontraditional for women
*****	<b>Mechanical Engineer</b> – Performs engineering duties to plan and design machines, engines, tools, and other mechanical equipment.	IRC	\$24.71 \$33.78	120 Openings 3,166 Total	Bachelor's Degree	Licensed Nontraditional for women

### A Sample of Related Postsecondary Programs of Study

- Civil Design
- Geographic Information Systems
- Manufacturing Engineering Technology
- Mechanical Engineering Technology
- Pre-Engineering
- Surveying

### The Pathways

- Pre-Engineering (Utah Pre-Engineering Program)
- Project Lead the Way (National Pre-Engineering Program)

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### Additional Resources

[www.utahtsa.org](http://www.utahtsa.org)

The Technology Student Association (TSA) is the student leadership organization for Technology and Engineering Education.

**UtahFutures.org**  
Career Information System

Access your SEOP and get detailed education and occupational information.